

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (currently amended) A procedure for improving the performance of electrodes, catalyst-coated membranes (CCMs), ~~or~~ and membrane-electrode assemblies (MEAs) in an electrochemical cell, said procedure comprising the steps of:

a) hydrating at least one of said electrodes, said CCMs and said MEAs in an aqueous solution containing at least one organic material at ~~an elevated a~~ temperature above ambient, at the boiling point thereof in order to enhance performance; and

b) operating said electrochemical cell comprising ~~the~~ at least one of said hydrated electrodes, CCMs, ~~or~~ and MEAs, and observing said performance.

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Claim 2. (currently amended) The procedure according to claim 1, wherein said hydrating step (a) does not exceed 30 minutes.

Claims 3 - 7 (cancelled)

Claim 8. (currently amended) The procedure according to claim ~~3~~ 1, wherein the aqueous solution is in the form of steam.

Claims 9 - 10 (cancelled)

Claim 11. (withdrawn) An article fabricated in accordance with the procedure of claim 1, wherein said electrodes, CCMs, and MEAs, contain at least one catalyst layer comprising ionic material, and a water-repelling agent.

Claim 12. (withdrawn) An article fabricated in accordance with the procedure of claim 1, wherein the electrochemical cell comprises a proton-exchange membrane fuel cell.

Claim 13. (withdrawn) An article fabricated in accordance with the procedure of claim 1, wherein the electrochemical cell comprises a direct methanol fuel cell.

Claim 14. (withdrawn) An article fabricated in accordance with the procedure of claim 1, wherein the electrochemical cell comprises an electrolyzer.

Claim 15. (withdrawn) An article fabricated in accordance with the procedure of claim 1, wherein said CCMS are composed of an ion-conducting membrane and at least one catalyst layer bonded thereto.

Claim 16. (withdrawn) An article fabricated in accordance with the procedure of claim 1, wherein the said CCMS are composed of an ion-conducting membrane and two, spaced-apart catalyst layers, each being bonded on opposite sides of the membrane.

Claim 17. (withdrawn) The article in accordance with claim 16, wherein the said ion-conducting membrane comprises a material selected from a group of materials consisting of: a non-fluorinated ionomer, partially fluorinated ionomer,

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perfluorinated ionomer, sulphonated polyetherketone,
sulphonated polysulfone, sulphonated polyphosphazene,
polystyrene sulphonic acid, and acid-doped polybenzimidazole.

Claim 18. (withdrawn) The article according to claim 16,
wherein said ion-conducting membrane contains organic or
inorganic dopants.

Claim 19. (withdrawn) The article according to claim 16,
wherein said ion-conducting membrane contains organic or
inorganic fillers.

Claim 20. (withdrawn) The article according to claim 16,
wherein said ion-conducting membrane is composed of a
supporting template whose pores are filled with at least one
ion-conducting material.